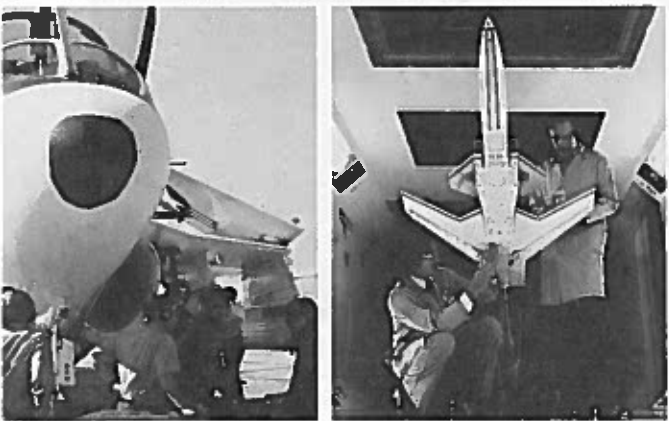
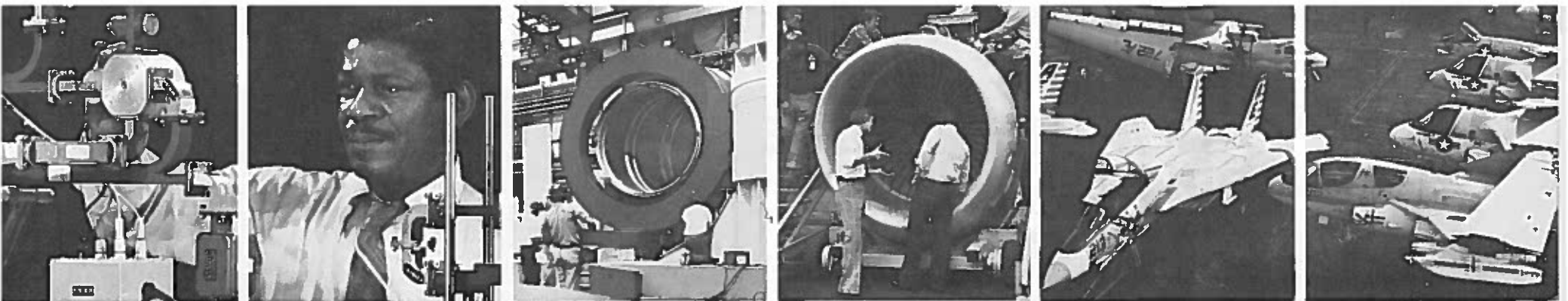
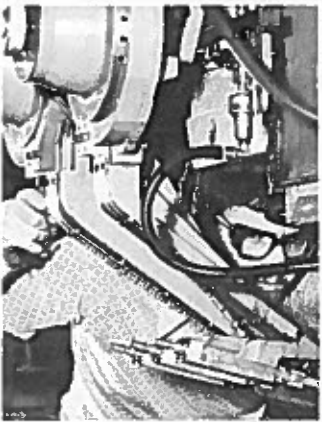


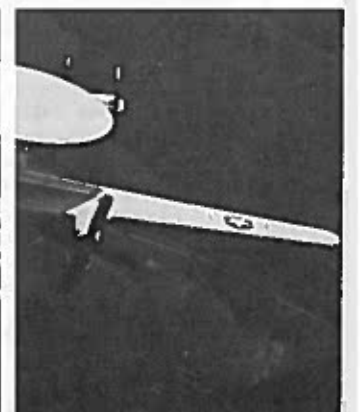
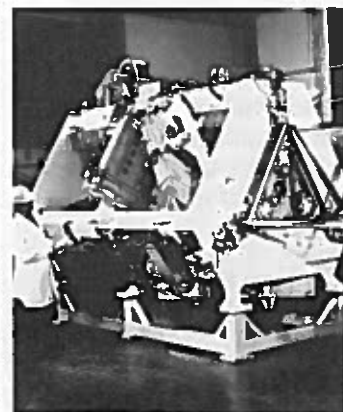
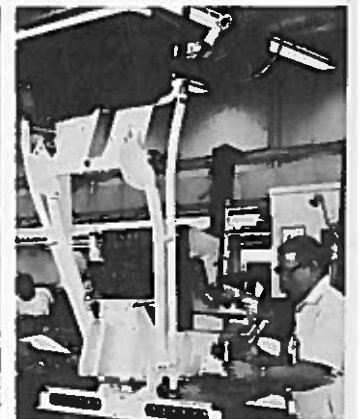


GRUMMAN plane news



Looking ahead in Aerospace

An interview with George Skurla
- pg. 4



New kid in class

Cronin named '81 scholar

Ralph Pallmer of West Hempstead High School and Theresa Cronin of Northport High School are two happy Long Island students. Pallmer, one of the 1981 Grumman scholars, recently learned that he was appointed to the U.S. Air Force Academy. Cronin, one of the scholarship alternates, was chosen to take Pallmer's place on the class of '81 roster.

She is the daughter of Jerry Cronin, who is director of Engineering for Grumman Allied Industries' Flexible division. This June, Cronin will graduate number three in her class of over 800.

The new Grumman scholar plays varsity basketball and is a member of the track team. She enjoys travel-

ing, jazz dancing, playing the violin and directing plays.

Cronin plans to attend Massachusetts Institute of Technology to study electrical engineering.

The 12 winners of the 1981 Grumman Science and Engineering scholarships will receive up to \$3,500 a year for four years undergraduate tuition expenses. Of the 12, six students are Grumman dependents and six were winners in the open competition. All are judged on the basis of their college board scores, achievement in school, and personal interviews.

The 1981 scholars will be welcomed to the company at a special luncheon held in their honor on June 2.



At the Cronin home. Grumman scholar Theresa Cronin (C) is surrounded by brother Brian, sister Eileen, mother Mary and father Jeremiah. Theresa also has two older brothers Jeremiah Jr. and Bill and a sister, Margaret.

Super walkers: sore feet, happy hearts

Super Walk Sunday was April 26, and thousands of Long Islanders took a long walk in the sunshine to raise money for the March of Dimes. More than 300 of them were Grummanites.

About 250 of the Grumman walkers checked in for the Suffolk County event, which was held at Colonie Hill in Hauppauge. The rest chose the Nassau County walk, which started out from Eisenhower Park in East Meadow.

Grumman Aerospace President

George Skurla greeted walkers at Eisenhower Park, along with Super Walk chairman Bobby Nystrom of the New York Islanders. Out at Colonie Hill, Super Walk co-chairman Joe Fields of the New York Jets was on hand to cheer for the Suffolk strollers.

So far, the March of Dimes estimates that Grummanites raised over \$15,000 for the fight against birth defects. Each participant asked friends and relatives to pledge money for every kilometer they walked. The final tallies have not yet been completed.

"The average sponsor list added up to \$50 or so," says Gail Grossman of the March of Dimes. "But a number of people went way over that."

For example, Sandy Volpe and JoAnn Cipriano, both of Plant 35. Between them, they signed up seven sheets of sponsors. JoAnn raised over \$1,000, and Sandy raised about \$550.

"This is the fourth year we've walked," Sandy explains, "and every year we get more and more people to sponsor us. The first year, we just did it as a goof — no one believed we could go the whole distance, but we did. Now we're old pros at it. We don't even get blisters any more."

What's the secret?

"Lots and lots of Vaseline," says JoAnn. "It wrecks your sneakers, but it saves your feet."

Sandy has a special interest in the March of Dimes this year: she's hoping for a beautiful, healthy baby this October.

Dick Virgilio of Plant 25 knows that the March of Dimes is a good

cause; but he also figured that the walk would be fun.

"I walk a lot just for the exercise — but I've never attempted to walk 15 miles," says Dick. "You never know if you can do it until you try."

Ed Grassi of Plant 2 walked with his two sons, Joseph and Mark. "Two things motivated me to finish the whole 25 kilometers" he says. "The jokes around the shop that I'd only make it to the first poop station . . . and the poster that said 'Walk For Someone Who Can't Walk.'"



Keep on walkin'. More than 300 Grummanites joined the thousands of Long Islanders who walked in the March of Dimes' Super Walk on Sunday, April 26. The Grumman walkers helped raise over \$15,000 to help fight birth defects.

Personals

I want to thank my co-workers and friends for their kindness during my recent illness. Viola M. Drinkwater

On behalf of my family and myself I wish to express our gratitude to all of my co-workers for their kindness and thoughtful expressions of sympathy during the recent loss of my mother. Stanley S. Ramsden and Family

We wish to express our sincere thanks for the kind and thoughtful expressions of sympathy during the recent loss of my father. Joseph Fontana and Family

I wish to express my sincere thanks and deep appreciation for the kind and thoughtful expressions of sympathy during the loss of my husband. Mildred Gutch

We wish to express our thanks and appreciation for the thoughtful expressions of sympathy during the recent loss of my father. Laura Husarik and Family

We wish to express our sincere thanks and appreciation to our friends and co-workers for their kindness and sympathy during the recent loss of our father. Charles and Jim Rondeau and Family

We wish to express to all our Grumman friends our deep and sincere appreciation for the kindness, generosity and sympathy shown during the recent loss of my father. Eugene S. Graziano and Family

We wish to express our thanks and appreciation for the thoughtful expressions of sympathy during the recent loss of our son. Edward Sweezy and Family

Final results: '80 investors gained ground

Despite the roller-coaster economy of 1980, it was a good year for the Grumman Employee Investment Plan.

At the plan's annual meeting on April 23 in Plant 28A, it was announced that the Equity and Fixed Income Funds had higher returns on money invested than most similar investment vehicles. In addition, the Guaranteed Income Fund has a special, high interest rate for all 1981 contributions.

Current and retired Grumanites met with representatives of Bankers Trust, the plan's trustee; Fiduciary Trust Company, which manages the Equity and Fixed Income Funds; and the Aetna Insurance Company, which manages the Guaranteed Income Fund. Grumman Corporation Secretary Bob Bradshaw chaired the meeting.

Bradshaw announced that the total value of the plan had grown to \$208 million. "That's pretty impressive growth. Quite a big slice of it is in Grumman stock, which includes the company's match," said Bradshaw.

The company matches an employee's contribution of up to 4% of base pay into the plan with a 65 percent contribution. This matching rate can be adjusted quarterly between 50 and 100 percent, but it remained at 65 percent all last year. "We are looking forward to the time," Bradshaw said, "when the company's performance will allow us to break through 65 percent."

High interest

As previously announced, employee contributions to the Guaranteed Income Fund in 1981 will receive a 13.28 percent interest rate. "The 1981 contributions," Aetna's Norman Wells explained, "will also be credited with that rate for the next two years."

In order to take better advantage of the current high short term interest rates, the Investment Plan Committee looked into an Aetna Special Fund, which utilizes shorter term investments than their general account.

The 13.28 percent rate paid on this year's contributions, invested in the Special Fund, will affect the blended rate for the entire fund. This blended rate is a weighted average of all the interest rates at which contributions into the Guaranteed Income Fund were invested over the years.

One of the criticisms had been that this blended rate couldn't cash in on sudden rises in interest rates, such as those seen in the last year. But, Bradshaw explained, "On the other hand, it doesn't leave investments vulnerable to sudden drops. One of the qualities of the Guaranteed Income Fund is that it has a fair amount of inertia. The reason we stay with it, for the time being at least, is that we see inherent stability in it."

"Keep in mind," he said, "what we have here is a Plan whose basic purpose is to satisfy long range goals: retirement, college for the kids."

The interest rate on all money in the fund will be 10.02 percent this year. Aetna guarantees that the blended rate will not drop below 9.45 percent through 1985.

Rough-riding the economy

The Equity and Fixed Income Funds performed well, according to Grumman's Bill Parmentier, in spite of the unusual economic conditions

in 1980. Parmentier, who manages Grumman's pension fund, evaluates the performance of Fiduciary's management of the two funds.

"It was one of the most volatile years on record in the financial market," he told the audience. "Bond volatility," referring to the rapid changes in bond prices in 1980, "exceeded stock volatility for the first time last year."

According to Fiduciary's Geoffrey Getman, "1980 was a tough year to try and get a positive rate of return in the bond market," where contributions to the Fixed Income Fund are invested. Nonetheless, he said, the fund's rate of return was 6.6 percent. This was better than 85 percent of all the portfolios evaluated by the A.G. Becker Evaluation Service which Parmentier uses to rank the funds.

Total investment in the Fixed Income Fund is over \$13 million. About 40 percent of that is invested in money market instruments; most of the remainder is in bonds. Of the present bond holdings, 70 percent are "AAA" or U.S. Treasury notes.

Taking stock in technology

While the Fixed Income Fund is upgrading its bond holdings, the Equity Fund is increasing its holdings of technology stocks. "The technology explosion in this country and the world is creating extraordinary windows of opportunity," Fiduciary's Larry Huntington

said at the meeting.

Expectations for the coming year are that the fund will diversify its stock holdings. "We are broadening our exposure," Charles Upson, also of Fiduciary, explained. "We are becoming less focused than we have been in the last several years." Upson said they have purchased shares of General Motors, Eli Lilly and other industrial stocks, and some regional banks.

Question

There was a question about the change in the withdrawal process. Under the procedures set up last year, a withdrawal request made before the eighteenth of the month is paid by the end of the month. A withdrawal made after the eighteenth is paid by the tenth of the following month, according to Bankers Trust's Peter Krahe. Bradshaw told a questioner that, "We have indeed shopped around among savings plan administrators and satisfied ourselves. These systems are geared to a monthly basis; none of them respond any faster than Bankers Trust."

Stats

The slides used by each of the fund managers at this meeting to explain the fund's holdings and performance will be reproduced in a pamphlet.

To get a copy call the Investment Plan Office, Ext. 7250.

PAC invites Sen. D'Amato

The fourth annual meeting of the Grumman Political Action Committee will take place on Wednesday, May 20, in Plant 4, Hangar No. 3, at 4:30 p.m.

The guest speaker will be Senator Alphonse D'Amato, the first U.S. Senator from Long Island since 1831. Senator D'Amato has long been a supporter of Grumman.

Federal election laws are specific in allowing only PAC members to attend such meetings, so it is suggested that all eligible employees who are not already members sign up by obtaining a card at your local Employee Services (ES) office, or by contacting the PAC treasurer, Bill Wachino, Ext. 3687.

GRUMMAN plane news

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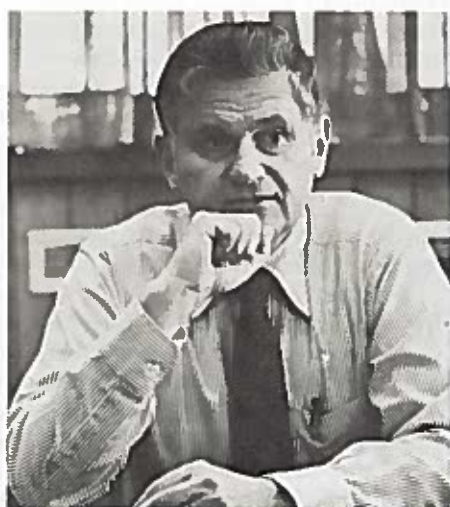
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Putting it all together. The first 767 airliner — the first all-new Boeing airliner design since the 747 — is being assembled in Boeing's Everett, Washington, plant. Grumman builds the wing center section/keel beam assembly and six other end-items for the 211-passenger airliner, the first of which will be delivered to United Airlines in 1982. The plane pictured here is scheduled for its first flight this September.

'Frankly, I'm quite bullish on our overall business outlook'



Since President Reagan took office, there has been a great deal of speculation about how his proposed policies would affect the economy and, more specifically, the defense industry. Plane News talked with President George Skurla recently to find out what that means for Grumman Aerospace.

Plane News: How do you see Aerospace's future shaping up?

George M. Skurla: I see Grumman Aerospace's future looking brighter than it has for a long time. Frankly, I'm quite bullish on our overall business outlook for at least the next five to seven years — and then some.

PN: Are you as optimistic for the entire aerospace industry?

GMS: Yes. In general, I see the industry on the threshold of a sustained growth period lasting through most of this decade. This should be true not only for prime military and commercial airframe manufacturers but for subcontractors and suppliers, too. What is unique about Grumman's situation is that we have more military aircraft models now in production than any of our competitors. In addition, we have supplementary commercial subcontract programs that will be active into the early 1990s. Obviously, the Reagan Administration's commitment to significantly increase our nation's defense posture is the major underlying factor. But, I see the commercial aerospace sector also coming on strong when the economy turns for the better. In short, there's going to be plenty of business in the years ahead for those companies that are turning out the right hardware!

PN: Is Grumman Aerospace turning out the "right hardware"?

GMS: Yes. We certainly are. However, 18 months ago we were confronted with a different situation. If the proposed Carter/Brown fiscal

1981 defense budget had gone through unmodified, three of our four Navy production lines would have been shut down by the end of 1984... and there would have been about 9,000 fewer employees on the payroll. The only program that looked solid at that time was the E-2C Hawkeye. Fortunately, all this isn't going to happen — thanks to the combined efforts of a lot of people at Grumman, the uniformed Navy, and members of Congress who restored \$425 million dollars for additional procurement of our aircraft in the fiscal 1981 defense budget bill.

I think we're producing what the Navy really wants and needs more of. Should the number of aircraft carriers be increased from 12 to 15 or 16 by the end of the decade, as has been proposed, it is reasonable to expect that the demand for our products should remain strong through most of this decade.

PN: Specifically, where do we now stand on our four Navy aircraft lines?

GMS: Well, among our "four aces," as we like to refer to them, the F-14 Tomcat will continue to be our big hitter. Although the yearly production rate of this aircraft has steadily been decreasing from the 72 a year we delivered in 1977 to the 30-a-year rate we are now at, I see us staying at the present level of production through at least 1986. Due to international and other developments, an increase in rate is still a possibility in the out years. As we work with the Navy on their long-range force level projections, it is more and more apparent that instead of a maximum buy of some 500 F-14's, the Navy is likely to procure 800 or more. And with the F-14C scheduled to start coming off the production line in late 1983, the Tomcat is going to continue to be the "best buy in town" as far as carrier air defense and air superiority fighters go.

Right now the F-14 with its Phoenix Missile System is really the only defense we have against the main threat to our Navy — the Russian "Backfire" bomber with its long-range air-to-surface cruise missiles.

PN: You mentioned the F-14C — is that the airplane that will get the more powerful engine?

GMS: No. Although we are about to start flight testing an F-14 with prototype GE101X engines installed, I don't see an advanced technology engine with greater thrust going into the Tomcat until later in this decade. It will probably show up in the F-14D — the "Super Tomcat" — which is beginning to take shape in the minds of our program people for introduction sometime in the second half of the '80s. In the meantime, the F-14C will have an improved and more durable version of its present TF-30 power plant known as the 414A mod, in addition to expanded radar capabilities.

In short, the youngest member of our "cat" family (The F-14 first flew in 1970.) is doing better than ever and will continue to do so with improved production models.

PN: How does the E-2C program look for the 1980s?

GMS: Great! The Hawkeye is the oldest of our Navy tactical aircraft lines, having evolved from the E-2A which first flew in 1959. Its airborne performance and operational readiness off the decks of our carriers has been just superb! The Navy looks solid in their intention to continue to buy at least 6 of these aircraft a year through the rest of the 80s. Like the F-14, improvements to the present airborne early warning systems are being worked on to dramatically increase the detection and tracking of the Hawkeye.

PN: What's the A-6E Intruder's outlook for the future?

GMS: Although it has been in

production for over 20 years — and we have delivered more than 600 of these aircraft to the Navy — the A-6 is still the best all-weather, day-or-night attack system in the U.S. arsenal. In recent years its production rate has fluctuated due to defense budgetary squeezes. Twelve A-6s are now in the fiscal '81 budget, and I am confident that we will stay at this rate at least through the first half of the 1980s. To say the least, it has been a real bread-and-butter program for us.

At this time, we see no new major tactical aircraft programs on the horizon for the Navy. Accordingly, we have been stressing the importance of "expanding and extending" the system capabilities of all of our aircraft product lines. Getting more operational capability out of what already is in production is the only way to go. The AWSAC System currently under development is a good example of what I'm talking about. We expect this all-weather standoff attack control system to be incorporated into future A-6Es — and, naturally that will mean additional production line and engineering work. Incidentally, with this system, the Intruder will have the ability to hit targets from distances 10 times farther away than is now possible. That standoff capability will dramatically reduce the A-6's vulnerability to ground fire.

PN: Do you think the production future of the EA-6B is as good as the other three tactical aircraft we're building for the Navy?

GMS: Yes! For the next several years, I'm confident that procurement will stay at or close to the present six aircraft delivery rate. Like the other three tactical "aces" we are producing for the Navy, the Prowler is second to none in design excellence and operational effectiveness. The present electronic system has evolved over a number of years and we are continually updating its automatic capability.

PN: There is a lot of speculation that Aerospace may get to build some more C-2 Greyhound carrier-onboard delivery aircraft — CODs. What can you tell us about that?

GMS: Well, it's more than a speculation. Barring any last minute developments, it appears that Congress will approve the Navy's intent to give Grumman a sole-source procurement contract for at least 39 new C-2s. We have been pursuing this sale for over six years and I guess persistence and a lot of outstanding work by our people has really paid off. It's a billion-dollar program over five years and approximately 750 people will be involved at peak. I might note that right now there are more airplanes on the decks of our carriers with "Grumman" stamped on their rud-

der pedals than any other — and getting this job will add more aircraft to the list. Starting up the C-2 line will resurrect a program that saw the last production aircraft built way back in 1965!

PN: If the aircraft production line business looks fairly encouraging as we move through the decade, what about all of the support business you speak about from time to time?

GMS: The Integrated Logistics Support world at Grumman has a strong business future. When our customer buys an airplane, he buys a lot more than just the airframe and what's inside. He also buys a measured amount of spare parts, ground support and test equipment, technical manuals and maintenance trainers. This may not be the "glamorous" part of the business, but it is essential to the operating units. Over the next four years, we are projecting approximately \$1.5 billion of business in this area!

PN: You've given us a good idea of how you see Aerospace's future with the U.S. Navy. How about foreign sales? What are the prospects there?

GMS: Well, the \$2-billion Iranian contract for F-14s was the biggest single offshore aircraft sale the Grumman company has ever had and it will probably hold that record for years to come. Future sale of the F-14 to other foreign countries is very unlikely at this time. We had a real shot at selling the Tomcat to Israel, Japan, Saudi Arabia and Canada over the past six years. In each case, we lost out to the F-15 except in Canada where the F-18L won out. I'm convinced that if these past potential customers were in the marketplace right now for a new air superiority fighter, we would win at least one, if not two, of these competitions. I believe that the in-

more and more foreign attention. To date, we have sold four Hawk-eyes to the Israelis and eight to the Japanese. Indications are that the Israelis want more and the Japanese may eventually go for as many as 15 or 20 aircraft. Right now there is also a strong interest in procuring the E-2C by the Greek, Egyptian, Australian and French governments. Just recently we completed a very successful in-country demonstration of the E-2C's detection and tracking capability for the French Air Force. Indications are that if they buy, they would be looking for eight to 12 aircraft.

Foreign sales interest for the A-6E has been very limited to date, and the EA-6B's highly proprietary electronic countermeasures system is such that the Defense Department and State Department have not permitted its sale abroad. However, I believe we still might get to sell one or both of these aircraft to a friendly foreign country some time in the second half of this decade.

PN: Is there any interest in out-of-production aircraft in the foreign marketplace?

GMS: Yes. There is, but not from a new production standpoint.

For example, right now we are pursuing the opportunity to overhaul and modify some 20 OV-1 Mohawk aircraft for the Philippines and another Far East country. Concurrently we have submitted a major proposal in competition with another aerospace contractor to overhaul and modify 68 A-4D attack/trainer aircraft for the Malaysian government. This latter contract, should we win it, would be worth several hundred million dollars and would be mainly done at our new St. Augustine facility, where we are now modifying used Grumman Albatross amphibians for commercial use.

I think we should remember that we've done business with the Air Force here and there over the years — as a matter of fact we built and delivered several hundred SA-16 Albatross amphibians to the USAF Air Sea Rescue Command during the Korean War. In fact, one of these aircraft is on display at the Air Force Museum at Wright Patterson. And don't forget that as an associate contractor to General Dynamics we built 560 fuselage back-ends and stabilizers for the F-111 which is still in operational service.

But in 1975, we received our first significant contract with the

that we will gain valuable first-hand experience from.

PN: What about VTOL — where are we going with that concept?

GMS: As you know, we have had a strong interest in vertical takeoff and landing aircraft for some years now. We have tested a full-scale VTOL model of our unique design 698 configuration in the NASA Ames wind tunnel — and the results were outstanding. Armed with these results, we are vigorously pursuing Navy funding for a flying technology demonstrator. It appears that with the Chief of Naval Opera-

'...from everything I've seen and heard so far [on VTXTS], I don't think anyone is running ahead of us'

Air Force when we were awarded the development and modification contract for conversion of 42 F-111s into EF-111s — a tactical jamming aircraft utilizing an improved version of the electronic countermeasures system we developed with the Navy for our EA-6B Prowler. This one-billion-dollar program has given us a major opportunity to work closely with the Air Force on a very sophisticated weapon system program, and I'm happy to say that we have performed well.

PN: How about our interface with the Air Force on advance airframe technology?

GMS: I think over the past five or six years we have developed a very strong reputation with the Air Force Technology Center at Wright Patterson. We have gotten numerous technology study contracts with that agency which is enhancing our technical reputation and credibility to be a prime competitor for the Air Force's next generation fighter, known as the Advanced Tactical Fighter. We are setting our sights to go after that major production contract with as much vigor as we went after the F-14 in the late 1960s.

PN: Will the forward swept wing program help us in this regard?

GMS: Most definitely. We are building a flying technology demonstrator for Defense Advanced Research Agency, but the program will be managed by the Air Force. Besides the composite forward swept wing concept to be evaluated, there are several other advanced technology concepts applicable to the Air Force's Advanced Tactical Fighter

tion's publicly-stated support, funding for such a first-step demonstrator program is beginning to materialize. However, it is important to keep in mind that this concept has a long way to go before being completely accepted by the surface, as well as the air, Navy.

PN: What about the VTXTS trainer program — are we in a good competitive position to win?

GMS: I think the combined Grumman, Beech and Singer/Link team we have put together is outstanding. However, we are in competition for this \$3-billion, 350-airplane program against four other major aerospace teams. Winning this one is not going to be easy. But from everything I've seen and heard so far, I don't think anyone is running ahead of us. We recently submitted our Phase I study results and are waiting to be chosen as one of the two Phase II finalists. Following submittal of the Phase II study results, the Navy will pick one contractor for the research-and-development and production award. If we were to win this trainer aircraft contract, it would not become an active production program until the second half of the 80s.

PN: Can you tell us where Aerospace might be going in its interest for fusion energy?

GMS: I think we have established a good foothold in this developing high technology area for a new energy source. Our involvement on the Tokamak Reactor Program at Princeton has gone well so far and our funded working relationship

(Continued on page 6)

'Our E-2C is emerging as a star attraction in the international marketplace'

herent potential of the F-14 weapon system and its growing reputation around the world would make the difference in their final decision.

While the opportunities for selling the F-14 abroad are just about completely behind us, our E-2C is emerging as a star attraction in the international marketplace. This mature and compact airborne early warning system, which sells for approximately one-fourth the price of the highly publicized AWACS, is getting

PN: What are your views in regard to Grumman pursuing Air Force business?

GMS: There is no question that for the most part our company's heritage over the first 50 years has been Navy oriented. After all, Roy Grumman was a naval aviator before starting the Grumman Aircraft Engineering Corporation. But times are changing, and we are now dedicated to being a prime contractor for both the Navy and the Air Force.

Skurla on Aerospace

(Continued from page 5)

with the Oak Ridge National Laboratory in Tennessee is in place. The big questions that we are now coming to grips with are to what extent should we commit our corporation's financial resources in pursuit of this growing marketplace, and where can we best fit in with our high-technology in-house capability? We are in the process of sorting out the answers to those questions right now.

PN: Up to this point we have been talking mostly about our airplane business prospects; now let's talk about your outlook on the space side of the house. First, what did you think of the recent shuttle flight?

GMS: Well, Columbia really made a gem of a flight. It's great to see this country back in the manned-space flight business again — and I hope for keeps this time. I saw it go off pad 39 at Cape Kennedy and I can't tell you the thrill I had during the countdown and the memories it brought back of my six years down there as

mosaic sensors and large membrane radar antenna systems. Both of these technology areas are key elements leading to a new generation of orbiting detection and surveillance systems.

Concurrently, I think that now that the shuttle program has gotten off the ground, the NASA payload business should pick up and receive greater funding support in the immediate years ahead. The work we have done on the space beam builder, solar power satellites, manned remote work station, and others should lead to increased business opportunities in the space part of our aerospace world. However, at this time there is nothing in the visible future that has a potential business impact on Grumman like the Lunar Module.

PN: Where are we going in the subcontracting world and, specifically, what do you mean when you speak of "concentric diversification?"

GMS: I think we are doing quite well in the world of subcontracting — better than some people may have initially thought.

The Boeing 767 and 757 jobs as well as the Cammacorp nacelle subcontract program demonstrate this.

Although subcontract work has historically been looked upon as a fill-in activity at Grumman, I believe we can make this a permanent and very profitable part of Aerospace's future business makeup as we move through the 80s. By being very selective and bidding only on opportunities that have long-range commercial and/or military out-

can't help but get the feeling that you are quite excited and definitely bullish on Aerospace's future.

GMS: That I am. I think that we have a lot going for us in terms of business momentum. The challenge is to keep it that way. Increased productivity and on-schedule delivery of quality products to all of our customers, both military and commercial, is a must. Staying out of trouble by not over-committing our in-house managerial talent and production capability is something

'Winning our share of the new generation programs is critical to Aerospace'

looks — like the new Boeing fuel-efficient airliners, and the CX, the B-1, MX, the nacelles for new generation engines — we can add a new dimension to our future.

PN: What are our plans for Grumman Houston and our Great River electronics operations?

GMS: Grumman Houston has come along surprisingly well in the last several years in terms of growth in both sales and profit. We originally started the operation down there more or less as a station-keeping activity outside the gates of the Johnson Space Center.

However, through aggressive on-site management and support from Bethpage, this operation has grown into a well-established subsidiary of Aerospace, producing specialized electromechanical hardware and associated equipment mostly for the booming oil drilling industry. We're looking to continue this growth pattern in the immediate years ahead by expanding into other select areas.

In regard to Great River, we also see a very strong growth potential not only in support of our in-house aircraft programs, but also in regard to subcontracting opportunities with big-name customers like IBM. Additionally, we are looking to see Great River develop in-house product lines for both the military and commercial markets. New generations of automatic checkout equipment and cockpit control units are examples of some of the possibilities under consideration. At the same time, we are looking at opportunities for organizational realignments and new business approaches to enhance our marketing opportunities for the inherent business potential we see for both Great River and Houston.

PN: From all you've said, one

we must guard against. At the same time, we must make astute investments in capital expenditure in the immediate years ahead to maintain our overall competitiveness.

At the moment, our work force is at approximately 21,000 people. With the new work we have recently won, we should grow in population modestly over the next 18 months. But, let me say that the present situation does not mean that there might not be a reduction in force in certain areas of our operation due to improved overhead and operational efficiencies, or diminishing need for certain skills.

PN: In summary, would you care to comment on how you see the 1990s shaping up for Aerospace?

GMS: Well, I think trying to project that far into the future without a crystal ball is next to impossible, especially with the international geopolitical scene so uncertain. However, I'm confident that the Grumman Corporation and Aerospace will be around, as strong as ever. Being a company that today is in a period of transition, I suspect that by the 1990s we will be a much better balanced corporation in terms of domestic and international product lines.

But, between now and the beginning of the next decade, we are facing one hell of a challenge — with the high probability that some of our current mainline programs will be phasing down or out by 1990. Winning our share of the new generation programs is critical to Aerospace. Although the next decade is a way off, we are currently working on our corporate strategy and marketing plans to make things come our way. With a bit of luck and a lot of hard work, I'm convinced we can make it happen!



'Our longer range space hardware opportunities will be in the area of payloads — both scientific and military'

director of our LM program test and launch operations.

With the Russians having men almost continuously in space, I believe the shuttle program will become more and more military oriented. However, that super successful first flight several weeks ago marks the beginning of a new era — one that we have been waiting for. Although we are the builders of the shuttle wings and elevons, our longer-range space hardware opportunities will be in the area of payloads — both scientific and military.

PN: What kind of payloads are you talking about?

GMS: Apart from those classified areas we can't talk about, I think we established our credentials with the Air Force as a leader in

Late in the 1970s it became apparent that our aircraft programs for the Navy could slowly erode away by the early 80s through lack of defense funding. Accordingly, we embarked on an aggressive campaign to seek out selective subcontract opportunities both in the commercial and military areas to support our business base. That way, as we moved into the 80s, we could stay competitive as a prime airframe manufacturer from a cost and production standpoint. When I speak of 'concentric diversification,' I'm talking about moving out into new business areas that are akin to what we know best. With all of the production programs we have going for us, I have a lot of confidence in the experience of our personnel to handle new jobs cut of the same cloth, so to speak.

Women rally to take bowling title

On paper, it looked like Grumman did not field the most powerful women's varsity bowling team this year. Others in the Long Island Industrial Women's Bowling Tournament sported much higher team averages than Grumman's respectable 153.

But that didn't deter Grummanites Pat Ogilvie, Ellen Steimle, Rita Mathia and LuAnn Calsetta. A tourney is not won on statistics.

On the opening night of the tourney, Grumman held its own against the archrival Nassau County team. Thanks to Calsetta's 776 four-game series, Grumman resided in second place . . . 13 pins behind Nassau County. The Grummanites rolled 315 pins above their team average that evening.

The following week saw Nassau County increase its lead to 70 pins. "Going into the final night of play, we knew we had our work cut out for us," says Ogilvie, Grumman team captain. "But we knew that we'd be going head-to-head against Nassau County in the final round. We play our best in that kind of situation."

And that they did. Steimle led the way in the first game with 205. Ogilvie added a 187 game, while teammates Mathia and Calsetta rolled games of 155 and 169, respectively.

Grumman moved into first place residency by 16 pins over Nassau County.

In the next game, Grumman opened up the pin spread to 63. Calsetta registered a 223 game, while Steimle, Ogilvie and Mathia added games of 180, 178 and 176, respectively.

"We knew we had the title then," says Ogilvie. "The team was working together. If one person had a below par game, the others picked up the slack. Cheering each other on didn't hurt either."

Calsetta rolled another 223 game in the next round. Grumman had built up a 94-pin lead going into the final game. Nassau County's last minute surge was not enough. Grumman captured its 19th Long Island championship title since the tourney began in 1944.

The paper tiger had turned into a roaring lion on the alleys. Grumman had rolled 921 pins over its team average. Calsetta was named the top bowler with her 2,269 total pinfall. She averaged 189 during the tourney.

Her teammates also proved to be keen tournament competitors. Steimle had a 170 average, Ogilvie, 167, and Mathia, 162. Not bad for a team that only had a 153 average going into the tourney.



Bowling champs. Members of the Grumman varsity bowling team (L to R) LuAnn Calsetta, Ellen Steimle, Rita Mathia and Pat Ogilvie won the 1981 L.I. Industrial title.

Two Toastmasters talk their way to distinction

Against some of the best speakers in Long Island, Queens, Staten Island and Westchester, Frank Hurley and Andrea King both finished second in their competitions in this year's Toastmasters division-level tournaments. King went to the next level as an alternate, but did not compete. Hurley was unable to make the next competition.

The Division-level speech contest was held on April 27 at Antun's in Hicksville.

King, a buyer for Grumman, was the only female competitor at any level above Grumman's club's competition. She took second place with a speech titled "Minorities in a Majority World." It was the same speech she used to defeat all other speakers from Long Island in an area-wide contest held on April 20.

Although King only recently joined the Grumman Toastmasters club, she has already become a polished speaker. After her area contest speech she found, to her surprise, that people regarded her as an expert. "They asked me to give them some tips on how to be so calm in front of a group." Yet, she had been so nervous about the speech that she hadn't been able to fall asleep until three that morning. During her performance she cut her speech short, although the audience never knew. "I was too scared," she says. "I couldn't go on any longer."

While King was cleaning up in the speech competitions, Frank Hurley was slowly moving up the ladder in the evaluation competition. In this phase of competition,

the contestants have to evaluate either one of the speeches in the contest, or a "canned" speech given by a seasoned speaker.



Andrea King

"It's tough," says Hurley, a charter member of the Grumman Toastmasters, "because it's strictly impromptu." Once the speech they must evaluate is over, the contestants have five minutes to gather their thoughts. Hurley says he practices for evaluation contests by writing and rehearsing quotations for specific speech defects he may hear. "You don't have much time to prepare during the competition. It becomes a listening contest."

Hurley, chief chemist in the Quality Control labs, also finished second in the area-level evaluation contest.

Ending's a strikeout

The Great River and Calverton varsity softball teams started the season well by finishing second and third in the Gerald Palermo Memorial Tournament in Brookhaven, Long Island.

Both Grumman teams, however, were shellacked in the double elimination playoffs by Hawkins and Spence, the tournament winner.

The 15 teams in the tournament were split up into three divisions.

Great River won the "B" division crown and Calverton's squad did the same in the "C" division. The two Grumman teams then faced each other in the first round of the playoffs.

"They beat us," Great River's coach Frank Cioffi says, "and put us into the loser's bracket." Which put Calverton into the winner's bracket and gave them the right to play Hawkins and Spence.

With three words, Calverton's "Chick" Robb summed up the opposing team. "They were overwhelming." Calverton lost by a 20-2 score.

Down, the Calverton team got the knockout punch from their fellow Grummanites when Great River beat them 6-1. Calverton was out of the tournament and Great River had one more chance at winning it.

But Great River had even worse fortune against Hawkins and Spence, a team Great River's Bob Albert calls the "major leagues." Cioffi, when asked to describe the game, said, "We were destroyed." Great River lost by a 20-0 score.

obituaries

EDWARD MILUK of Measurements Standards, Pl. 6, died April 11 at the age of 58. He had been with the company since 1963 and resided at 745 Tenth Street, Islip Terrace.

WALTON W. MITCHELL of PPO-F-14, Pl. 25, died April 18 at the age of 60. He had been with the company since 1966 and resided at 681 Central Ave., Massapequa.

ROBERT R. RUOTOLO of Material M/S, Pl. 43, died April 22 at the age of 42. He had been with the company since 1956 and resided at 25 Fiesta Dr., Centereach.

scorecard

One-derfull!

It was after 6 p.m. and getting dark when Tony Uravitch teed up his ball. He was hitting to the 11th green of Bethpage's Green course. The last hole of the day was 170 yards away. "From there, we were going to walk in," says Tony, a member of the Grumman varsity last year and a seven-handicap golfer.

"I hit it good," he says, "but we lost it," in the darkness and couldn't see where it landed. They looked everywhere. "The hell with it," he told the other guys. "It's not worth the ball."

While the others were putting out, he told them to take a look in the cup. There it was.

It's not that Tony's second hole-in-one wasn't an exciting event. It was. "We had pizza that night to celebrate." But, if you want to hear about excitement, about the perfect golf shot, ask Tony to tell you about his first hole-in-one.

It was in Wichita, Kansas, on July 4, 1964. "How could I forget it?"

"I hit it so good it went into the cup, on the fly, and stayed in!"

Club developing

Grumman Recreation has announced the formation of the Photography Club, which will meet on alternate Mondays at 5 p.m. in Plant 28A. Next scheduled meeting is on May 25, and new members are welcomed.

The club offers lectures, open discussions, and evaluation sessions of individual photo tech-

niques. For more information, contact Dick Burdish, Ext. 115-8493.

Pinehurst set

Three dates for the Mixed Pinehurst golf tournaments have been announced, so pick your partner now. The fields for each are limited. The Pinehursts will be played on June 17, July 29 and August 26. It costs \$12 per two person team to play. The first and last will be played on Bethpage's Yellow course, the second on the Blue course.

If you haven't played in a Mixed Pinehurst before, here's how it works:

The man and woman making up each team both drive from the tee, but play the other's ball on the second shot. For the third shot they choose the best lie of the two and alternate playing the ball until they hole out.

The team with the lowest gross score wins a trophy. There are also kickers' drawing prizes. To win one of these, you and your partner pick a handicap before you start, which, when subtracted from your final score, will give you a net score between 30 and 40. Those who fall into the range will be eligible for a prize drawing.



Aces on the table. Trophy winners in the 1981 Table Tennis Tournament held in Plant 28A are: (L to R, standing) John Squicciarino, George Harrington, Richard Isaacs, Fred Danner, Marty Finkelman, Ted Stefaniw, Bob Giotta and Diane Linnell; (kneeling) Paul Granite, Phyllis Fink, Vin Leonard, Kang Ng and Bill Mobley.

calendar

Aikido Club: every Mon. and Wed., 5:15 p.m., GAA bldg.; for sport and self-defense; L.I. Aikido Federation; all Grumman employees welcome. B. Bauman, Ext. 3013

Alcoholics Anonymous: every Mon., 4:30 p.m., Pl. 15, conference room C, closed meetings; Personnel Relations, Ext. 3521; Calverton: Chemical Dependency Discussion Group, every Mon., 4-5 p.m., Hdg. Bldg.; open meeting. C. Robb, Ext. 117-6526

Coin Club: (Calverton) every Fri., noon lunch, Pl. 6 conference room. W. Kondratowicz, Ext. 6680

Dance Club: every Wed., 5-8 p.m., Recreation bldg. Guests welcome. G. Cupolo, Ext. 4155

Fencing Club: every Wed., 4:30-6:00 p.m., Recreation bldg. Guests welcome. J. Hayne, Ext. 5556/P. Chaldaris, Ext. 3638

Folk Dancer's Club: (Calverton) every Thurs., 2nd floor, Pl. 6, lunchtime, Grumman employees only. J. Hamelman, Ext. 117-6835

Karate Club: every Tues. and Thurs., Recreation bldg., 5:15 to 7:00 p.m., black belt instructors, physical and mental development; beginners and guests welcome. T. Ortiz, Ext. 4764

LI L-5 Society: Tues., May 19, Merrick Library Annex, 7:30 p.m. Planning a Long Island shuttle payload and presentation on the launch of Columbia. Guests welcome. P. Levitt, Ext. 9723

Model Railroad Society: every Wed., 7 p.m., Recreation bldg. Regular meeting. Guests welcome. R. Muntz, Ext. 115-6330

Roller Skating Club: every Thurs., Levittown Skating Rink, 7:30 to 11 p.m. Lessons 6:30 to 7:30 p.m. Guests welcome. H. Denen, Ext. 2291

Stamp Club: First three Wed. of every month; 5-6 p.m., Pl. 35 cafeteria; trading sessions and discussions. S. Hoops, Ext. 3926/8586

Table Tennis: every Thurs., Pl. 24, 5 p.m. also every Fri., Recreation bldg., 5 p.m. Beginners and guests welcome. B. Fabricant, Ext. 9307

Tap Dancing Club: every Monday, Recreation bldg., 4:45 to 5:30. Beginners and guests welcome. P. Tropea, Ext. 8091

Tennis Club: Wed., May 20, Recreation bldg., Room A, 5 p.m. Beginners to advanced players welcome. J. Blumling, Ext. 5184/B. Owen, Ext. 7629

GRUMMAN plane news